



PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application of:

Kohl, et al.

Serial No.: 10/699,330

Filed: October 31, 2003

Confirmation No.: Not yet assigned

Group Art Unit: Not yet assigned

Examiner: Not yet assigned

Docket No.: 062020-1540

For: Sacrificial Compositions, Methods Of Use Thereof, And Methods Of Decomposition Thereof

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

Sir:

This information disclosure statement is filed in accordance with 37 C.F.R. §§ 1.56, 1.97, and 1.98, and specifically:

- ☒ under 37 CFR 1.97(b), or
(within Three months of filing national application; or date of entry of international application; or before mailing date of first office action on the merits; whichever occurs last)
- ☐ under 37 CFR 1.97(c) together with either a:
☐ Statement Under 37 C.F.R. 1.97(e), or
☐ a \$180.00 fee under 37 CFR 1.17(p), or
(After the CFR 1.97(b) time period, but before the final office action or notice of allowance, whichever occurs first)
- ☐ under 37 CFR 1.97(d) together with a:
☐ Statement under 37 CFR 1.97(e), and
☐ a \$180.00 petition fee set forth in 37 CFR 1.17(p).
(Filed after final office action or notice of allowance, whichever occurs first, but before payment of the issue fee)

Enclosed is a check in the amount of \$. Please charge \$ to deposit account . At any time during the pendency of this application, please charge any fees required to Deposit Account pursuant to 37 CFR 1.25. The Commissioner is hereby requested to credit any overpayment to Deposit Account No. 20-0778.

- ☒ Applicant(s) submit herewith *Form PTO 1449A - Information Disclosure Statement by Applicant* together with copies (where required) of patents, publications or other information of which applicant(s) are aware, which applicant(s) believe(s) may or may not be material to the examination of this application and for which there may be a duty to disclose in accordance with 37 CFR 1.56. As required by 37 C.F.R. §1.98(a), a legible copy of each document is provided.
- ☐ A concise explanation of the relevance of foreign language patents, foreign language publications and other foreign language information listed on PTO Form 1449, as presently understood by the individual(s) designated in 37 CFR 1.56(c) most knowledgeable about the content is given on the attached sheet, or where a foreign language patent is cited in a search report or other action by a foreign patent office in a counterpart foreign application, an English language version of the search report or action which indicates the degree of relevance found by the foreign office is listed on the form PTO 1449 and is enclosed herewith.

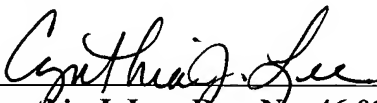
The following rights are reserved by the Applicant(s): the right to establish the patentability of the claimed invention over any of the listed documents should they be applied as reference, and/or the right to prove that some of these documents may not be prior art, and/or the right to prove that some of these documents may not be enabling for the teachings they purport to offer.

This statement should not be construed as a representation that an exhaustive search has been made, or that information more material to the examination of the present application does not exist. Any statements or identifications regarding the relevance of any portion(s) of cited references should not be construed as a representation that the most relevant portion(s) have been identified, and the absence of such statements or identifications should not be construed as representations that there are no relevant portion(s). The Examiner is specifically requested not to rely solely on the materials submitted herewith. The Examiner is requested to conduct an independent and thorough review of the documents, and to form independent opinions as to their significance.

It is requested that the information disclosed herein be made of record in this application and that the Examiner initial and return a copy of the enclosed PTO-1449 to indicate the documents have been considered.

Respectfully Submitted,

THOMAS, KAYDEN, HORSTEMEYER
& RISLEY, L.L.P.

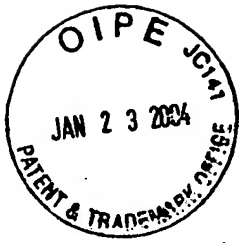
By: 
Cynthia J. Lee, Reg. No. 46,033

100 Galleria Parkway, Suite 1750
Atlanta, Georgia 30339-5948
770-933-9500

CERTIFIED MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as "First Class Mail," in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on January 28 2004.


Signature: Gloria Simmons



CERTIFICATE OF MAILING

I hereby certify that the below listed items are being deposited with the U.S. Postal Service as first class mail in an envelope addressed to:

**Mail Stop
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450**

on. 01.20.04

Gloria Simmon
Gloria Simmon

In Re Application of:

Kohl, et al.

Serial No.: 10/699,330

Filed: October 31, 2003

Confirmation No.: Not yet assigned

Group Art Unit: Not yet assigned

Examiner: Not yet assigned

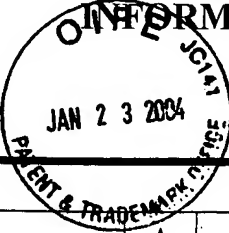
Docket No.: 062020-1540

For: Sacrificial Compositions, Methods Of Use Thereof, And Methods Of Decomposition Thereof

The following is a list of documents enclosed:

Return Postcard
Information Disclosure Statement
Information Disclosure Citation - Form PTO-1449 (2 Pages)
Cited References (20 References)

Further, the Commissioner is authorized to charge Deposit Account No. 20-0778 for any additional fees required. The Commissioner is requested to credit any excess fee paid to Deposit Account No. 20-0778.

Form PTO-1449		Attorney Docket No. 062020-1540	Serial No. 10/699,330
 <p>INFORMATION DISCLOSURE CITATION (Use several sheets if necessary)</p>		Applicant Kohl, et al.	
		Filing Date October 31, 2003	Group Not yet assigned
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, etc.)			
	A	P. A. Kohl, Q. Zhao, K. S. Patel, D. Schmidt, S. A. Bidstrup-Allen, R. Shick, S. Jayaraman, Air-Gaps for Electrical Interconnections, Electrochemical and Solid State Lett, vol. 1, p. 49, 1998.	
	B	P. A. Kohl, D. M. Bhusari, M. Wedlake, C. Case, B. C. Lee, R. J. Gutmann, R. Shick, Air-Gaps in 0.3 μm Electrical Interconnections, IEEE Electron Device Lett., vol. 21, p. 557, 2000.	
	C	H. A. Reed, C. E. White, V. Rao, S. A. Bidstrup-Allen, C. L. Henderson, P. A. Kohl, Fabrication of microchannels using polycarbonates as sacrificial materials, J Micromech Microeng., vol. 11(6), p. 733, 2001.	
	D	D. Bhusari, H. A. Reed, M. Wedlake, A. Padovani, S. A. Bidstrup-Allen, P. A. Kohl, Fabrication of Air-Channel Structures for Microfluidic, Microelectromechanical, and Microelectronic Applications, J Micromech. Microeng., vol. 10(3), p. 400, 2001.	
	E	M. B. Anand, M. Yamada, H. Shibata, Use of Gas as Low-k Interlayer Dielectric in LSI's: Demonstration of Feasibility, IEEE Transactions on Electron Devices, vol. 44, p. 1965, 1997.	
	F	C. K. Harriett, G. W. Coates, H. G. Craighead, Heat-depolymerizable polycarbonates as electron beam patternable sacrificial layers for nanofluidics, J Vac. Sci. Technol B., vol. 19(6), p. 2842, 2001.	
	G	L. S. Lee, K. K. Gleason, Hot Filament Chemical Vapor Deposition of Polyoxymethylene as a Sacrificial Layer for Fabricating Air Gaps, Electrochemical and Solid State Lett., vol. 4, p. G81, 2001.	
	H	H-J. Suh, P. Bharathi, D. J. Beebe, J. S. Moore, Dendritic Material as a Dry-Release Sacrificial Layer, J. Microelectromech. Syst, Vol. 9(2), pp. 198-205, 2000.	
	I	J. P. Gravesen, J. Bianejer, O. S. Jensen, Microfluidics - A Review, J Micromech. Microeng., vol. 3, p. 168, 1993.	
	J	R. F. Service, Microchip Arrays Put DNA on the Spot, Science, vol. 282, p. 396, 1998.	
	K	J. V. Crivello, J. H. W. Lam, Diaryliodonium Salts. A New Class of Photoinitiators for Cationic Polymerization, Macromolecules, vol. 10(6), p. 1307, 1977.	
	L	R. Taylor, The Nature of the Transition State in Ester Pyrolysis. Part II. The Relative Rates of Pyrolysis of Ethyl, Isopropyl, and t-Butyl Acetates, Phenylacetates, Benzoates, Phenyl Carbonates, and N-Phenylcarbamates, J Chem. Soc, Chem. Commun., p. 1025, 1975.	
	M	S. Inoue, T. Tsuruta, T. Takada, N. Miyazaki, M. Kambe, T. Takaoka, Synthesis and Thermal Degradation of Carbon Dioxide-Epoxy Copolymer, Appl. Polym. Symp., vol. 26, p. 257, 1975.	
	N	J. M. J. Frechet, F. Bouchard, F. M. Houlihan, E. Eichler, B. Kryczka, C. G. Wilson, Design and synthesis of novel allylic and benzylic copolycarbonates susceptible to acidolytic or thermolytic depolymerization, Makromol. Chem. Rapid. Commun., vol. 7, p. 121, 1986.	
<p>* EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to the applicant.</p>			
EXAMINER'S SIGNATURE: J. Microelectromechanical Sys., vol. 10, No. 3, pp. 400-8, September 2001.		DATE CONSIDERED:	

062020-1540

10/699,330

Kohl, et al.

October 31, 2003

Not yet assigned

INFORMATION DISCLOSURE CITATION

(Use several sheets if necessary)

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, etc.)

0

S. C. Narang, S. T. Attarwala, Chemical Amplification in t-Diol Polycarbonate Resists, Polym. Prepr., (Am. Chem. Soc. Div. Polym., Chem), vol. 26(2), p. 323, 1985.

P

D. J. Drensbourg, J. R. Wildeson, J. C. Yarbrough, J. H. Reibenspies, Bis 2,6-difluorophenoxide Dimeric Complexes of Zinc and Cadmium and Their Phosphine Adducts: Lessons Learned Relative to Carbon Dioxide/Cyclohexene Oxide Alternating Copolymerization Processes Catalyzed by Zinc Phenoxides, *J. Amer. Chem. Soc.*, vol. 122, p. 12487, 2000.

O

M. Murayama, F. Sanda, T. Endo, Anionic Ring-Opening Polymerization of a Cyclic Carbonate Having a Norbornene Structure with Amine Initiators, *Macromolecules*, vol. 31, p. 919, 1998.

R

Y. Toba, M. Saito, Y. Usui, Cationic Photopolymerization of Epoxides by Direct and Sensitized Photolysis of Onium Tetrakis(pentafluorophenyl)borate Initiators, *Macromolecules*, vol. 32(10), p. 3209, 1999.

S

J. V. Crivello, J. Lockhart, J. Lee, Diaryliodonium Salts as Thermal Initiators of Cationic Polymerization, *J. Polym. Sci Part A: Polym. Chem.*, vol. 21, p. 97, 1983.

T

D. Bhusari, H. A. Reed, M. Wedlake, A. M. Padovani, S. A. Bidstrup-Allen, P. A. Kohl, Fabrication of Air-Channel Structures for Microfluidic, Microelectromechanical, and Microelectronic Applications, *J. Microelectromechanical Sys.*, vol. 10, No. 3, pp. 400-8, September 2001

* EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to the applicant.

EXAMINER'S SIGNATURE: J. Micromechanical Sys., vol. 10, No. 3, pp. 400-8, September 2001.

DATE CONSIDERED: